R-PRESENT RISK

Fiscal		Cost	Fiscal		Cost
year	Count	(in millions)	year	Count	(in millions)
1985	1,960	\$4.4	2000	3,275	\$34.9
1986	2.820	\$3.6	2001	3,969	\$13.5
1987	2.789	\$251.4	2002	3,660	\$7 .9
1988	2,652	.\$6.2	2003	4,409	\$54.0
1989	. 2,999	\$24.3	2004	4,679	\$53 .6
1990	3,056	\$6.8	2005	5,107	\$21.8
1991	2,692	\$18.6	2006	5,019	\$16.2
1992	2,539	\$17.8	2007	5,002	\$28.4
1993	2,410	\$18.4	2008	4,819	\$11.0
1994	2,281	\$15.9	2009	4,707	\$15.2
1995	2,693	\$91.0	2010	4,723	\$22 .3
1996	2,960	\$5.4	2011	4,471	\$13.1
1997	2.886	\$10.4	Total	95,383	\$820.6
1998	3,116	\$25.2			million
1999	3,690	\$29.1	SOURCE: AIR FORCE		

Bird-strike damage to aircraft poses challenge for Air Force

By ANDY MEDICI amedici@federaltimes.com

A bird strike that cut short a demonstration by the Air Force's Thunderbird team last month in Atlantic City, N.J., illustrates the service's ongoing challenge in sharing airspace with feathered

One notable example: Two T-45 Goshawk trainer jets crashed in 2007 and 2008 after birds were sucked into the engines.

Since fiscal 1985, the Air Force has spent more than \$820 million repairing aircraft damage caused by birds - more than \$13 million in fiscal 2011 alone.

And the challenge is growing: "Over the past several years, large bird populations have been increasing due to national conservation efforts," said Col. Stephen Matson, chief of the Aviation Safety Division at the Air Force Safety Center, which oversees the Bird/Wildlife Aircraft Strike Hazard program.

The service has deployed a variety of techniques - including pyrotechnic displays and even lasers - in an attempt to startle birds and scare them from runways and limit damage and loss of life.

At Homestead Air Reserve Base in southern Florida, bird strikes have been reduced by more than 90 percent, according to Edward Avalos, undersecretary for marketing and regulatory reforms at the Agriculture Department.

USDA's Animal and Plant Health Inspection Service recommended strategies to reduce the number of

bird strikes at the air base — such as removing water features and otherwise making the grounds less attractive to birds, according to

"This valuable service continues to protect the aviators and 26 F-16 fighter jets housed there," he wrote in a blog post.

The Air Force uses a variety of methods to reduce bird strikes,

■ Cutting grass and maintaining plant height at 7 to 14 inches, which reduces the number of birds that will create nests on airfields.

■ Hanging nets in hangars and shade shelters to reduce the number of birds congregating there.

■ Installing bird detection radars to help pilots avoid large concentrations of birds at four airfields, including Dover Air Force Base, Del., and at Dare County Range,

The Air Force has even teamed up with the Smithsonian Institution to collect bird DNA to catalog which species of birds live near which airfield, to better understand how to reduce their potential danger to aircraft.

Matson said many natural factors cause bird strikes, including climate change, weather patterns and the presence of predators.

He also said lower altitude flights run a greater risk of bird

As for the Thunderbird strike, the aircraft had only minimal damage and all the planes were landed safely at the New Jersey Air National Guard's 177th Fighter Wing in Egg Harbor Township.

FAA: Number of bird strikes has quintupled over 2 decades

IG: Incidents are underreported

By BART JANSEN

The Federal Aviation Administration doesn't keep good track of how many times planes strike birds, and its inspectors often aren't familiar with wildlife, according to an inspector general's report last month.

Jeffrey Guzzetti, assistant inspector general for aviation at the Transportation Department, said the FAA can't be sure airports have good plans for coping with wildlife or that FAA inspectors who review the plans have expertise in wildlife.

Reported bird strikes have quintupled in the past two decades. "Increases in the populations of hazardous wildlife species continue to challenge airports' ability to provide a safe operating environment," Guzzetti said in his 30-page report.

The FAA said in a statement that the agency has taken a comprehensive approach to reduce wildlife strikes since 1960, using better research, technology, training and online reporting.

"The FAA has already adopted and completed a majority of the [inspector general's] recommendations and will continue to make improvements to the wildlife hazard mitigation program," the agency said.

The danger of bird strikes was dramatically illustrated in January 2009, when a US Airways flight taking off from New York's La Guardia airport struck Canada geese and Capt. Chesley "Sully" Sullenberger landed the plane in the Hudson River. All 155 passengers and crew survived.

No flights are immune. Vice President Joe Biden's plane hit birds April 19 while landing at California's Santa Barbara Airport but was able to land. There were no injuries.

The number of reported bird strikes rose from 2,166 in 1990 to 10,483 last year, according to the FAA. The agency estimates that bird strikes cause \$123 million in damage per year to engines, windshields and navigational equipment. But the inspector general found

that 108 strikes in internal logs at eight airports — more than one in five — weren't reported to the FAA in 2010. "Airport officials stated that they did not report all known strikes ... because it was not a requirement," the report said.

The FAA provided \$458 million to airports from 1997 to 2011 to reduce wildlife hazards. The agency estimates it will spend an additional \$366 million on the projects over the next 20 years.

The FAA created an educational program to alert pilots to the danger of bird strikes. The agency also developed bird radar, which has been deployed at Seattle, Chicago O'Hare, New York's Kennedy and Dallas/Fort Worth airports.

Other steps airports can take are reducing nesting places, draining ponds and eliminating food sources. Chemical sprays and noise can repel birds, and the red light from hand-held lasers has been found to disperse Canada geese.

Part of the challenge in coping with bird strikes is that 90 percent involve federally protected species.

The nonmigratory population of Canada geese, which are protected under the Migratory Bird Treaty Act, has quadrupled in the past two decades, according to the FAA. \square

Bart Jansen reports for USA Today.



